

CLAIMS

soot 1. Equipment for manufacturing a soot preform, comprising a reaction vessel, a burner that generates glass particulates, and a starting rod on which the glass particulates are deposited, said equipment being further equipped 5 with a partition board which is provided in part of the space around a soot preform in said reaction vessel such that the space is separated into an upper and lower part, an exhaust port is provided below said partition board in the side wall of said reaction vessel, and said burner is positioned in the space below said partition board.

10 2. Equipment for manufacturing a soot preform as defined in Claim 1, wherein the interval between said partition board and said exhaust port is 100 to 400 mm.

15 3. Equipment for manufacturing a soot preform as defined in Claim 1, wherein a hole for the passage of said soot preform is provided in said partition board such that the gap between said partition board and said soot preform is 10 to 80 mm.

20 4. Equipment for manufacturing a soot preform as defined in Claim 1, wherein said partition board is suspended by sling members from an upper position of said reaction vessel such that said partition board is movable up and down.

5. Equipment for manufacturing a soot preform as defined in Claim 1, wherein said partition board is made of one or more materials selected from the group consisting of nickel, quartz, and silicone carbide.

100-120-212-200-000

6. Equipment for manufacturing a soot preform as defined in Claim 1, wherein an air inlet is provided at a position opposite to said exhaust port below said partition board, in the wall of said reaction vessel.

7. A method for manufacturing a soot preform by depositing glass particulates, which are generated by hydrolysis reaction caused by combustion gas and raw material gas supplied to a burner provided in a reaction vessel, on the tip of or around a starting rod while turning said starting rod around its axis and drawing it up, said reaction vessel having a partition board provided in part of the space between said soot preform and the inner wall of said reaction vessel at a position above an exhaust port and said burner which are provided in the wall of said reaction vessel such that the space is separated into the upper and lower parts.